

LEVELAT

DR 1071 October 1979

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

AD AD

METEOROLOGICAL DATA REPORT

19702A GSRS Missile No. 315 Round No. B-40 12 October 1979 DTIC PLECTE MAR 1 2 1980

BY

White Sands Meteorological Team

THE COPY

CO

0

A A A S

ATMOSPHERIC SCIENCES LABORATORY WHITE SANDS MISSILE RANGE, NEW MEXICO

THIS DOCUMENT IS BEST QUALITY PRACTICABLE.

THE COPY FURNISHED TO DDC CONTAINED A

STORIFICANT NUMBER OF PAGES WHICH DO TO

FOR THE RODUCE LEGIBLY.

UNITED STATES ARMY ELECTRONICS COMMAND

80 3 10 126

DISPOSITION INSTRUCTIONS

Destroy this report when it is no longer needed. Do not return to the originator.

DISCLAIMER

The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

The citation of trade names and names of manufacturers in this report is not to be construed as official Government indorsament or approval of commercial products or services referenced herein.

DISCLAIMER NOTICE

THIS DOCUMENT IS BEST QUALITY PRACTICABLE. THE COPY FURNISHED TO DDC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
. REPORT NUMBER 2. GOVT ACCE	
00 1071	
DR 1071	5. TYPE OF REPORT & PERIOD COVERED
TITLE (and Subtitle)	
19702A GSRS	12, 19/
Missile Number 315	HO
Round Number B-485 12 October 19	6. PERFORMING ORG. REPORT NUMBER
· AUTHOR(e)	8. CONTRACT OR GRANT NUMBER(a)
	(16)
White Sands Metaphological Team	DA Task /1F665702D127-02
White Sands Meteorological Team Performing Organization Name and Address	10. PROGRAM ELEMENT, PROJECT, TASK
	AREA & WORK UNIT NUMBERS
	17.00
\$	
. CONTROLLING OFFICE NAME AND ADDRESS	12. REPORT DATE
US Army Electronics Research & Development C	md () Oct 79
Atmospheric Sciences Laboratory	NUMBER OF PAGES
White Sands Missile Range, NM 88002 Missile Range, NM 88002	49
	@ Office) 15. SECURITY CLASS. (of this report)
US Army Electronics Research & Development C	
Adelphi, MD 20783	UNCLASSIFIED
	15a. DECLASSIFICATION/DOWNGRADING
6. DISTRIBUTION STATEMENT (of this Report)	
ILL ER ANT AM /A	II NR W WALL
(14) ERADOOM/A	Sh-DR-1971
	T28 A27 1 10 20 A
7. DISTRIBUTION STATEMENT (of the abetract entered in Block 20, if o	different from Report)
7. DISTRIBUTION STATEMENT (of the abetract entered in Block 20, if o	different from Report)
7. DISTRIBUTION STATEMENT (of the abetract entered in Block 20, if a Approved for public release; distribution un	different from Report)
7. DISTRIBUTION STATEMENT (of the abetract entered in Block 20, if of Approved for public release; distribution un	different from Report)
Approved for public release; distribution un 8. SUPPLEMENTARY NOTES	al data repti
Approved for public release; distribution un 8. SUPPLEMENTARY NOTES 9 Meteorologic 9. KEY WORDS (Continue on reverse side if necessary and identify by bid 1. Ballistics	al data repti
7. DISTRIBUTION STATEMENT (of the abetract entered in Block 20, if a Approved for public release; distribution un 8. SUPPLEMENTARY NOTES 9. Meteorology 9. KEY WORDS (Continue on reverse side if necessary and identify by bid 1. Ballistics 2. Meteorology	al data repti
Approved for public release; distribution un 8. SUPPLEMENTARY NOTES 9. Meteorologic 9. KEY WORDS (Continue on reverse side if necessary and identify by bid 1. Ballistics	al data repti
7. DISTRIBUTION STATEMENT (of the abetract entered in Block 20, if a Approved for public release; distribution un 8. SUPPLEMENTARY NOTES 9. Meteorology 9. KEY WORDS (Continue on reverse side if necessary and identify by bid 1. Ballistics 2. Meteorology	al data repti
Approved for public release; distribution un 8. SUPPLEMENTARY NOTES 9. Meteorology 1. Ballistics 2. Meteorology 3. Wind	limited. al data reptick number)
7. DISTRIBUTION STATEMENT (of the abetract entered in Block 20, if a Approved for public release; distribution un 8. SUPPLEMENTARY NOTES 9. Meteorology 9. KEY WORDS (Continue on reverse side if necessary and identify by bid 1. Ballistics 2. Meteorology	limited. al data reptick number)
7. DISTRIBUTION STATEMENT (of the abetract entered in Block 20, if of Approved for public release; distribution un 8. SUPPLEMENTARY NOTES 9. Meteorology 3. Wind 0. ABSTRACT (Continue on reverse side if necessary and identify by block and id	limited. al data rept ock number)
Approved for public release; distribution un 8. SUPPLEMENTARY NOTES 9. KEY WORDS (Continue on reverse side if necessary and identify by bid 1. Ballistics 2. Meteorology 3. Wind Meteorological data gathered for the launchi	limited. al data reptick number) as of 19702A GSRS, Missile
Approved for public release; distribution un 8. SUPPLEMENTARY NOTES 9. KEY WORDS (Continue on reverse side if necessary and identify by bid 1. Ballistics 2. Meteorology 3. Wind Meteorological data gathered for the launchi	limited. al data reptick number) as of 19702A GSRS, Missile
7. DISTRIBUTION STATEMENT (of the abetract entered in Block 20, if of Approved for public release; distribution un 8. SUPPLEMENTARY NOTES 9. Meteorology 3. Wind	limited. al data rept ock number) ng of 19702A GSRS, Missile
Approved for public release; distribution un 8. SUPPLEMENTARY NOTES 9. KEY WORDS (Continue on reverse side if necessary and identify by bid 1. Ballistics 2. Meteorology 3. Wind Meteorological data gathered for the launchi	limited. al data reptick number) as of 19702A GSRS, Missile

CONTENTS

Description of the Part of the Action of the Part of t

DD your MIS cernes on House to Despetate

REPORT BOCCHIENTATION PAGE

			PAGE
	0.000	ON	
DISCUS	SION	and the second section of the second	. 1
LAUNCH	ARE	A MAP	. 2
GENERA	L AR	EA MAP	Sign Parker
TABLES	:	Ednagled Date and Arthur & Alexandra Arthur Arthur & Arthur & Balling & Ball	
	1.	Surface Observations taken at 1613 MDT at LC-33	. 4
	2.	Anemometer-Measured Wind Speed and Direction, LC-33 Fixed Pole, taken at 1612 MDT	- 5
	3.	Anemometer-Measured Wind Speed and direction, Tower Levels 1, 2, 3 and 4, taken at 1612	. 6
	4.	LC-33 Pilot Balloon Measured Wind Data at 1550 MDT	. 7
	5.	LC-33 Pilot Balloon Measured Wind Data at 1612 MDT	. 8
	6.	NICK SITE Pilot Balloon Measured Wind Data at 1612 MDT	. 9
	7.	SMR Significant Level Data at 1530 MST	. 10
	8.	SMR Upper Air Data at 1530 MST	
	Q	The state of the s	

INTRODUCTION

19702A GSRS , Missile Number 315 , Round Number B-40 , was launched from 1C-33 , White Sands Missile Range (WSMR), New Mexico, at 1612:06 MDT, 12 October 1979 . The scheduled launch time was 1600 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

- (1) Standard surface observations to include pressure, temperature (°C), relative humidity, dew point (°C), density (gm/m^3) , wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.
- (2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

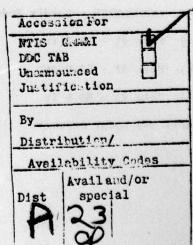
SITE AND ALTITUDE

LC-33 2 km NICK 2 km

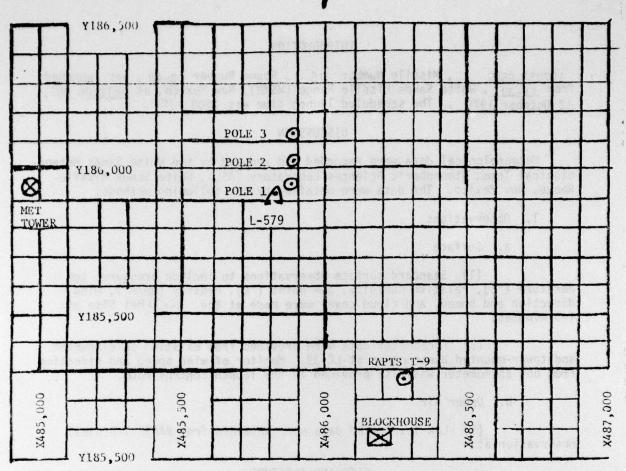
(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to $_{78,500}$ feet in 500-feet increments.

SITE AND TIME

SMR 1530 MST







- MET TOWER 4 Bendix Model T-20 Anemometers at 12 ft, 62 ft, 102 ft, and 202 ft with E/A recorders.
- 2. POLE ANEMOMETER Bendix Model T-120 with E/A recorders.

____echil will ideliava__

3. RAPTS T-9 Radar Automatic Pilot-Balloon Tracking System T-9 Radar.

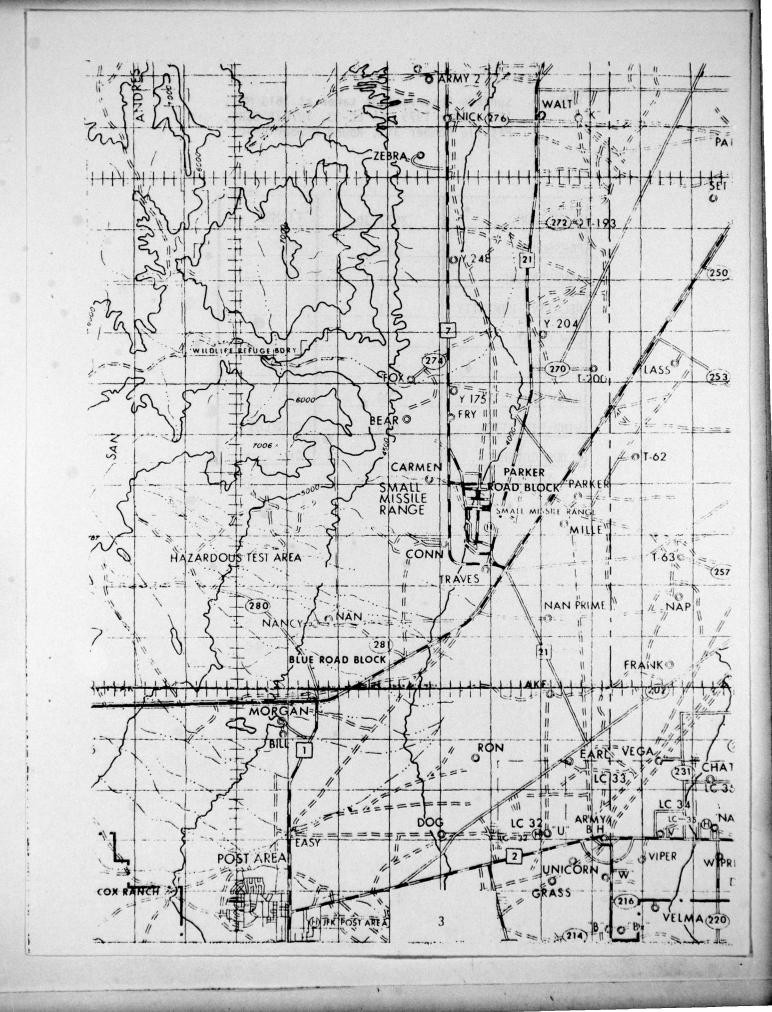


TABLE 1. Surface Observations taken at 1613 MDT, 12 October 1979, at LC-33, 19702A GSRS, Missile Number 315, Round Number B-40.

ELEVATION	3977.30	ΓT/MSL
PRESSURE	874.1	MBS
TEMPERATURE	31.1	°C
RELATIVE HUMIDITY	11	- W
DEW POINT	-2.7	O _C
DENSITY	997	GM/M ³
WIND SPEED	04	KTS
WIND DIRECTION	023	DEGREES
CLOUD COVER	1	Ci

LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

~	POLE #	1 Wasta	200	POLE #	12	7.00	POLE #3									
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPLED KTS								
-30	282	14	-30	280	13	-30	273	13								
-20	273	16	-20	280	10	-20	257	11								
-10	282	16	-10	284	14	-10	279	13								
0.0	276	14	0.0	280	14	0.0	276	14								
+10	278	11	+10	281	11	+10	268	13								

POLE #1 = X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL

POLE #2 = X485,874.93 Y186,012.00 H4033.57 53.0 ft AGL

POLE #3 = X485,877.29 Y186,116.06 H4063.92 83.6 ft AGL

TABLE 2			
TYPE 19702	A GSRS	MISSILE NO. 315	ROUND NO. B-40
LAUNCHED FROM	LC-33	DATE 12 October 1979	TIME 1612:06 MDT
NOTE: WIND DIR	ECTIONS ARE R	EFERENCED TO TRUE NORTH.	

LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

	EL #1 Feet		LEVE 62 F		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	MISG	10	-30	267	10
-20	MISG	10	-20	275	11
-10	MISG	10	-10	283	11
0.0	MISG	09	0.0	258	09
+10	MISG	07	+10	255	06
	EL #3 Feet	1	LEVE 202	L #4 Feet	11 1
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
- 30	264	12	-30	239	10
-20	275	11	-20	256	11
-10	263	10	-10	249	11
0.0	263	09	0.0	230	09
+10	246	08	+10	241	13

WTSM COORDINATES: X484,982.64 Y185,057.73 H3983.00 (base)

TABLE 3

TYPE 19702A GSRS MISSILE NO. 315 ROUND NO. B-40

LAUNCHED FROM LC-33 DATE 12 October 1979 TIME 1612:06 MDT

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

GSRS PILOT BALLOON MEASURED WIND DATA

TABLE 4	No							
RELEASED	FROM LC-33	D/	ATE 12 Octo	ober 1979		TIME 1550	MDT	MDT
TRACKER	COORDINATE	s (WSTM)	X= 486,037	7.24 Y=	182,350.10	6 H= 397	7.30	
MISSILE	TYPE 19702/	A GSRS	MISSILE NO.	315	•	ROUND NO.	B-40	
NOTE: W	IIND DIRECTI	ON ARE R	EFERENCED T	O TRUE NORT	il.			
HEIGHT	DIRECTION	CDEED	LUETCHT	DIRECTION	I corrn !	[HEIGHT	DIRECTION	SDEED
AGL	DEGREES	KTS	AGI	DEGREES	KTS.	AGL	DEGREES	KTS
SFC	024	05						
90	184	03				1		
150	270	10				0		
210	274	12						
270	275	15						
330	278	13						
390	273	12						
500	280	12				1 1-12	9a (
650	279	13	+ 6				£ 200	
800	265	11		*			1 (45)	Chill
950	262	10						
1150	260	11					N	1007
1350	264	12			i.		No.5	
1550	253	12					200	
1750	252	11				4		
2000	272	12				1 31	CAS.	
lan men					1			
			1					
		-			——			

GSRS PILOT BALLOON MEASURED WIND DATA

TABLE 5								
RELEASED	FROM LC-3	33 DA	TE 12 Octo	ober 1979	- 	TIME 1	612	MDT
TRACKER	COORDINATE	s (WSTM)	X = 486,037	7.24 Y=	182,350.	16 H= 397	7.30	
MISSILE	TYPE 19702A	GS RS N	MISSILE NO.	315		ROUND NO.	B-40	
	VIND DIRECTI			TO TRUE NORT	TH.	MATTER THAT		
HEIGHT	DIRECTION	SPEED	HEIGHT	DIRECTION			DIRECTION	
AGL	DEGREES	KTS	AGL	DEGREES	KTS	AGL	DEGREES	
SFC	270	12						
90	265	11				1) 1/2		
150	267	15				1		
210	265	12		1			E.S.	
270	277	13		1	1			
330	270	15					F135	
390	264	13					318.2	
500	264	11						
650	258	11	1				1984	
800	259	12				1 1		
950	268	12				1 1-2		
1150	276	12				1 1 1	305	
1350	280	12	4				885	
1550	276	12				1 1		
1750	281	12				25 1 31		
2000	276	12		1				
								B
			-					
		1		·				

GSRS PILOT BALLOON MEASURED WIND DATA

TABLE 6	FROM NICK	r	ATF	12 00	tober 1979		Т	IME 16	:12	MDT
RELEASED)									 '''
	COORDINATES									-
	TYPE 19702A						<u>.</u> K	OUND NO.	B-40	
IOTE: W	IND DIRECTI	ON ARE R	RE FE RE	ENCLD T	O TRUE MORT	н.				
	DIRECTION	A STATE OF THE PARTY OF THE PAR			DIRECTION				DIRECTION	
AGL	DEGREES	KTS	+	AGL	DEGREES	KTS		AGL	DEGREES	KIS
SFC	289	05	-							
90	294	06	-							
150	292	05	-					 		
210	276	04								
270	266	06							# §	
330	266	06			2	N L D C	T 0 0	(D) -1 +1 17 .	V 8	
390	270	05							4	6
500	246	09					1 00 1 1 2 1 1 1 1			
650	240	06				1 1 1 1	3 1 1			
800	254	06	0 1	W 20 -	0.5 (6.5	A (0.5)	a ve c			
950	249	07		1 2 2 2 3	7 52 62 3 14 15 15 1 7 7 70 70 70 70 70 1 8 8 8 8 8 7 8	0 V V 2	100 100	(2) +1-40-25 1-40-40-40		- 100 144
1150	264	08							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
1350	MISG	MISG		9 (1)						
1550	262	03		Contract		700	7 - 1 7 - 1 7 - 1		23 Eq. 30 27 (2)	
1750	297	02			0.00		4 G			
2000	297	04		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1						
									5	
			-				1000			

2050000349 S M R		LS CENTIGRADE	-2.3	6.	•	n-8-	-12.0	-13.7	-13.4	-17.2	-27.1	-45.8	55. -	8.7.4-	0.05 4.64-								· · · · · · · · · · · · · · · · · · ·	
	ALTITULE AIR	MSL FEET DEGKELS	3997.3 30.2	4414.1 28.2		6797.2 15.3		11071.1	15281.5								4.53.20.8 -60.8 4.53.20.8					61356.1 -67.5		78941.2 -51.8
7.30 FEET MSL 530 HRS MST		MILLIBARS	673.7	061.3			-		581.3 15		522.6 1						150-0				73.9 6			30.0

JEODETIC COORDINATES 32.48034 LAT DEG 106.42307 LON DEG	INDEX OF REFRACTION	1.000244	1.000244	1.000243	.00023	•		•	1.000222	1.000216	1.000.1	1.000207	1.000204	1.000200	1.000196	1.000193	1.000191	1.000169	1.000107	1.000164	1.000162	1.000179	1.600177	1.000174	1.000171	1.0001	1-00160	1.000155	1.000152	1.000149	1.000147	1.000145	1.600142	1.600140	*)	1.000136	1.000155	1.000131
JEODET I 32. 106.	DATA SPEEU	6.6	6.6	10.01	11.6	11.0	10.5	11.4	12.4	0.01	15.6	16.0	16.1	15.8	15.4	14.9		16.5	17.2	17.6	17.4	16.9	16.1	14.9	10.	11.0	13.1	16.7	16.5	18.4	20.1	21.6	23.3	24.3	25.0	26.0	27.1	28.1
	JINC DA DIMELTIO.	240.0	240.0	2000	200.4	204.0	219.5	201.5	505.5	2020	2020	204.4	7.007	203.4	293.0	299.0	2.662	297.0	294.3	291.0	20102	585-1	5007	, vad.	2.662	9.062	6.067	0.303	2007	2000	209.0	29109	292.4	Z-06-2	20402	200.5	270.0	21012
4	SPEED OF SOUND NINOTS	679.3	679.3	0.170	673.7	075.0	070.6	66.630	0000	0.000	2.000	0.100	6.500	057.60	4.7.00	050.1	654.7	5.500	651.8	6.000	040		T	. 440	6.240	0.040	1.600	7	2000	6.00.7	4.000	6:4.1	034.7	031.3	6.4.9	0	0.7.0	6,55.0
UFPER AIR LAI 2450060349 5 4 R TABLE 8	DENSITY GMZCUBIC MLTER	1001-1	1001-1	977.9	965.6	6-536	3.746	930.6	919.1	5.706	9.000	873.5	861.4	846.0	833.9	851.8	810.2	790.d	787.0	770.0	765.7	755.0	744.0	734.3	754.5	107	6.100	2.1.0	667.0	657.1	640.0	630.0	627.0	617.4	607.9	0		5.083
, IAT	REL.HUM. PERCENT	12.0	12.0	17.0	17.2	17.3	17.4	17.6	1/./	0.71	0.8	18.0	18.0	17.4	16.2	17.8	20.0	22.1	24.2	4.97	28.5	30.7	32.8	34.1	4.46	04.0	4.46	20.00	15.0	15.0	15.4	16.0	16.6	7	17.9	18.5	19.1	19.0
IT MSL MST	TEMPERATURE R DEWPOINT SES CENTIGRADE	-2.3	-2.3	•	-1.4	-2.5	-3.7	6.4	6.6	0.01	200	-10.3	-11.4	-12.4	-13.5	-13.2	-12.9	-12.7	-12.6	-12.6	-12.7	-13.0	-13.2	-13.9	1.5.1	10.0		0.17	27.2	1/0.5	-49.1	0.67-	-30.2	-30.4	-01.4		-32.6	-53.3
3997.30 FEET MSI 1550 HRS MST 9	AIR DEGREES	30.5	30.2	2000	25.2	23.7	25.5	20.7	19.2	11.0	2.01	13.5	12.2	111.4	11.2	10.1	6.9	4.2	6.3	5.1	3.8	9.7	1.3		-1.5	-2.3	1 1 1	1 1 1		200	-7.2	4.6-	-4.5	-10.7	-11.9	-13.0	-14.2	-15.3
1110JE 399	PRESSURE MILLIBARS	873.7	873.6	0.000	9.50	41+17	99999		-	-	7.0.9	719.7	700.8	69.4.1	601.0	0.400	0.000	9.44.6	652.9	621.1	609.7	593.4	507.4	576.5	500.0	0000	2	5.6.7		5,13.8		404.2	200			447.1	450.3	453.6
STATION ALITICUE : 12 OCT - 79 ASCENCION 110 - 540	DEUNETHIC ALLITUDE RSL FLEF	3997.3	4000-0	0.00	5500.0	0.0.00	0.000	70,0.0	75,0.0	0.000	0.0000	20.00	100.000	100.0.0	110,000	11500.0	12000.0	12500.0	13000.0	13500.0	1+000.0	1+5:00.0	0.000t	19500.0	100: 0.0	105000	0.0001	0.00	145 0-0	140.0.0	19500.0	600.00	405.10.0	<1000.0 × 0	215,000	6.00.022		<50000cz

REL.HUM. PERCENT	PERATURE	PERATURE
	CENTIGRADE	S CENTIGRADE
20.4		f.55c-
21.0		-34.6
	-35.3	
	-36.1	
	-35.9	
23.6		-37.7
24.3		-33.5
54.9		-39.4
55.6		-40.3
26.3		1-1-1
		-45.0
27.6		
		-43.B
28.9		8.44-
9.67		-48.7
30.5		-46.0
50.9	-47.6	9.24-
1000		
**6.67	0.10- 	- 15.0 - 4.50
	-56.4	-56.
	-59.5	-43.1 -59.5
	-03.3	-03.
	-03.5	-63.
	-79.0	-79.
		-46.3
		5.64-
		-50.7
		-51.9
		-53.1
		-54.3
	•	
		-50.7
		-58.0
		-59.1
		-59.9
		-69.7
		-61.5
		-62.3
		-01.7

** AF LLAST GIE ASSUMED RELATIVE HUMIDIFY VALUL MAS USED IN THE INTERPOLATION.

DETIC COORDINATES 32.48034 LAT DEG 106.42307 LO1, DEG		INDEX	OF KEFRACTION	1.000063	1.000061	1.000000	1.000059	1.000057	1.000056	GC0000-1	\$C0000.1	7500001	1000001	0000001	650000-1	1.00048	9500001	Ch0000-T	1.000044	1.000043	1.000043	7+00004	1.00004	1.000039	1.000038	1.600057	1.000036	1.000035	1.000054	1.00003	1.000013	1.00001	1.00001	1.000000	1.000029	1.0000	1.000020	1300001	1.0000.1	1.00000	1.000025	1.000024
SEODETIC 32.48 106.43		TA	SPEED	45.6	44.3	46.7	49.7	51.0	50.0	2	33.1	3000	2.40	4.02	1. 20	6.00	40.12	10.0	1011	10.0	10.01	17.7	17.1	16.9	16.8	15.7	14.0	12.4	711.5	10.9	2	0 0	1001	1.4.	12.4	12.7	11.9	10.01	7.5	y .	1.	?••
		"INU DATA	UINECTIO., DEGNEES(14)	275.5	1.697	207.0	270.3	272.0	272.4	7.17	2000	5000	2.063	1.162	4.014	2002	2002	G.007	0.007	7.007	C.C.27	2.007	270.	270.0	270.0	270.4	4.172	704.1	29004	2000	100	3050	200	316.4	313.7	418	3/4.		3.4.50	3	2 -	13.1
A143	(CONT)	SPEED OF	STOWN RNCTS	507.0			5.00c			204.3	1.400	200.0	2000	00000	7000						256.5								5.55.2		444				555.6	57.7	5,54,5	2	2000	3 2 3	1000	1.100
UPPER A1R DA1A 2050000349 S H R	TABLE 8 (C		GM/CUBIC MCTER	282.0	275.5	269.3	263.1	257.1	251.3	- 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	240.4	230.00	1.000	21010	212.2	2120	2002	2002	2061	7.061	1975	18.	174.5	175.5	171.4	160.8	162.3	157.9	150.9	147	145.4	134.9	Lanen	133.4	124.5	124.4	121.0	117.0			1	100.4
3 "			PERCENT																																							
3997.30 FEET MSL 1530 HRS MST 9		INPE	AIR DEMPOINT DEGREES CENTIGRADE	6.09-	-61.2	-61.5	-61.8	-62.1	-62.4	6.29-		1.40-	1.10	1.60-	6-10	5:40	1040	0.10	9.53	0.00	8.19-	9,70	-70.2	-70.9	-71.3	-70.9	-70.5	-70.1	-70·1 -70·5	-70.ea	-71.2	-71.6	-71.9	-72.3	-71.5	1,00.55	-67.9	-127.3	566.6	16,622	2.00	1.000
STATION ALIITUDE 3997 12 OCT - 79 ASCENSION NO. 349		PRESSURE	MILLIUARS	171.8	107.6	103.6	159.6	155.8	152.0	2001		15757		200	1.77.1	7	754.	11116	110.0	113.2	110.0	107.2	104.5	101.9	99.3	90.8	#***	92.0	69.7	85.2	03.1	01.0	78.9	70.9	75.0	73.1	71.3	3.60	07.8	Come 2	1 4 5	2.4.5
		GEUNE TRIC	ALTITUDE MSL FLET	435,0.0	44630.0	44500.0	45000.0	45500.0	40000.0	0.00.co+	0.000/+	0.00074	0.0000	0.00000	0.0000	0.0000	0.00000	0.00000	0.00010	0.0000	0.00000	55000.0	53500.0	540,00.0	6-0004-4	0.000cc	0.05550	0.00000	5000000 5700000	976.0.0	5.56.90.0	50500.0	0.00066	0.00066	0.0000	0.00500	0.00010	0.1503.0	מילחו מיט	0.00000	0.00	a a a a a a a a a a a a a a a a a a a

GEODETIC COORDINATES 32.44034 LAT DEG 106.42307 LON DEG	INDEX OF REFRACTION	1.000023	1.000063	1.000022	1.000022	1.000021	1.000020	1.000020	1.000019	1.000019	1.000018	1.600018	1.000017	1.000017	1.000017	1.000016	1.000016	1.000015	1.000015	1.000015	1.000014	1.000014	1.000013	1.000013	1.000013	1.000012	1.000012	1.000012	1.000011	1.000011	1.000011	1.000011
JEODET1.32.	SPEEU NNOTS	1.6	8.	*	1.2	2.7	0.4	5.5	9.9	7.3	8.4	8.3	7.8	7.2	8.9	7.1	7.9	0.6	9.5	9.1	0.6	9.3	6.6	10.6	10.7	11.1	11.8	12.6	13.4			
	WIND DATA DIRECTION S DEGREES(FIL) N	0.62	25.9	324.0	300.7	305.0	5.662	203.1	275.9	2000.0	250.1	7.6.57	251.4	258.9	270.0	294.5	2.000	315.0	315.5	305.7	2.667	7.707	269.9	259.4	249.4	239.0	257.9	233.5	238.5			
SONT)	SPEED OF SUCIND NAVIS	9.100	504.6	503.4	504.1	504.8	505.6	5000	0.700	5,7.0	50005	0.609	509.4	509.8	570.5	570.0	571.0	571.3	571.7	574.5	573.5	574.5	512.5	570.4	577.4	5/0.3	579.5	560.3	50000	50000	500.0	579.9
UPPER AIR LATA 205000349 TABLE 8 (CONT)	DENSITY SUM/CUBIC METER	105.5	104.0	6.66	97.2	94.5	92.0	85.5	87.1	84.8	82.5	80.4	78.3	76.4	74.5	72.6	70.9	0.69	2.10	65.5	65.7	0.79	h•09	5.0.8	57.5	55.7	2.45	52.8	51.5	50.4	47.5	40.5
•	REL . HUM. PERCENT																															
IT MSL MST	TEMPERATURE R DEWPOINT LES CENTIGNADE																															
STATICH ALIITUDE 3997.30 FEET MSL 12 OCT. 79 1536 HRS MST ASCENSION NO. 349	TEMP AIR DEGNEES	-65.1	-0400	0.49-	-63.5	6.29-	-62.4	-61.9	-61.3	60.7	-60.2	-59.8	-59.5	-59.5	-58.9	-58.6	-58.4	-58.1	-57.8	-57.2	-50.4	-55.7	-55.6	-54.5	-53.5	-52.8	-52.0	-51.3	-51.1	-51.3	-51.5	-51.6
	PHESSURC MILLIUMRS	0.50	4-10	6.60	5995	57.1	-	24.3	53.0	51.7	50.4	49.5	48.0		45.8	44.7	43.6	45.6	41.6	9.04	39.7			30.9							•	30.6
	GEUMETHIC ALITUDE MSC FELI	0.3500.0	0.00000	0.45.0.0	0.00000	0.00000	0.00000	0.00500	0.00020	0.000070	0.00000	0.00000	0.00060	0.000660	70050.0	705,0.0	/105010	71500.0	72000.0	72500.0	/360000	13500.0	74000.0	74560.0	7500000	75500.0	76000.0	70500.0	17000-9	77500.0	78000.0	14500.0

JEODETIC COORDINATES 32.46034 LAT DEG 106.42307 LON DEG																	
JEODETIC 32.4 100.4	AIN. DATA CTIUM SPEED ESCIN) KNOTS	10.7 2.0.1 3.0.0	7.00	50.0	000	30.7	43.2	0.24	47.5	21.8	10.8	10.6	11.5	5 .	2.9	0.,	
	JIRECTION DEGREES(IN)	251.0	20102	0.672	Z03.0	202.6	290.7	20305	274.0	205.7	277.3	300.2	350.1	340.5	247.7	300.1	
. 4 E. 5	RELONUM. PERCENT	17.	• • • • •	. 77	•07	•••											
MAHDATORY LEVELS 2650000349 S.M.R. TABLE 9	TEMPENATURE AIR DE POINT DEGREES CENTIGRADE	77.	-51.	7.55-	0.74	0											
Σ		27.3 22.1	21.00	-19.5	00.771	-47.4	-50.9	-61.4	-62.6	-64.7	-71.4	-71.7	-01.5	-64.1	-60.0	-50.7	-51.8
I MSL	EUPOTENTIAL PEET	4794. 0054.		.7463	41235	35570.	40286.	43011.	46144.	49403.	54205.	58543.	01140.	U421d.	67917.	72517.	78605.
STATION ALITUDE 3997.30 FEET MSL 12 OCT. 79 1530 HRS MST ASCEMSION NO. 349	PRESSURE GEUPOTE, TIAL MILLIBARS FEET	#50.0 000.0 7.75		0.004	0.000	250.0	200.0	175.0	150.0	125.0	100.0	80.0	0.07	0.09	90.0	0.04	30.0
STATION ALITTUDE 12 OCT - 79 ASCENSTON NO. 3										15							

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE NAS USED IN THE "NTERPOLATION"